

What is claimed is:

- SubB3
1. A primer set used in PCR for typing polymorphisms of DNAs encoding BoLA-DRB3.2 which comprises:
 - (1) a reverse primer capable of amplifying all alleles of BoLA-DRB3.2; and
 - (2) a forward primer capable of amplifying all alleles in any one of two or more groups of alleles of BoLA-DRB3.2 wherein each of said group comprises at least one allele, but incapable of amplifying any allele(s) in the other group(s).
 2. The primer set according to claim 1 wherein a forward primer comprises a portion of a DNA sequence encoding an amino acid sequence of the first hypervariable region of BoLA-DRB3.2.
 3. The primer set according to claim 1 or claim 2 wherein 96 kinds of alleles of BoLA-DRB3.2 are classified into the two or more groups of alleles of BoLA-DRB3.2.
 4. The primer set according to any one of claims 1 to 3 wherein 96 kinds of alleles of BoLA-DRB3.2 are classified into 8 groups, and wherein the forward primer is capable of amplifying all alleles in any one of said 8 groups but incapable of amplifying any alleles in the other groups.
 5. The primer set according to any one of claims 1 to 4 wherein the forward primer comprises a nucleotide sequence selected from the group consisting of the nucleotide sequences described in SEQ ID NOS: 1, 2, 3, 4, 5, 6, 7 and 8.
 6. The primer set according to any one of claims 1 to 5 wherein the reverse primer comprises a nucleotide sequence described in SEQ ID NO: 9.
 7. A forward primer used in PCR for typing polymorphisms of DNAs encoding BoLA-DRB3.2 which is capable of amplifying all alleles in any one of two or more groups of alleles of BoLA-DRB3.2 wherein each of said groups comprises at least one allele, but incapable of amplifying allele(s) in the other group(s).
 8. The primer according to claim 7 which comprises a portion of a DNA sequence encoding an amino acid sequence of the first hypervariable region of BoLA-DRB3.2.
 9. The primer according to claim 7 or 8 wherein 96 kinds of alleles of BoLA-DRB3.2 are classified into the two or more groups of alleles of BoLA-DRB3.2.
 10. The primer according to any one of claims 7 to 9, wherein 96 kinds of

alleles of BoLA-DRB3.2 are classified into 8 groups, and wherein said primer is capable of amplifying all alleles in any one of said 8 groups, but incapable of amplifying any alleles contained in the other groups.

11. The primer according to any one of claims 7 to 10 which comprises a nucleotide sequence selected from the groups consisting of the nucleotide sequences described in SEQ ID NOS: 1, 2, 3, 4, 5, 6, 7 and 8.

12. A primer set comprising a forward primer and a reverse primer capable of amplifying all alleles of BoLA-DRB3.2, wherein said forward primer comprises a nucleotide sequence described in SEQ ID NO: 12 and said reverse primer comprises a nucleotide sequence described in SEQ ID NO: 9.

13. A forward primer capable of amplifying all alleles of BoLA-DRB3.2, wherein said forward primer comprises a nucleotide sequence described in SEQ ID NO: 12.

14. A method for typing polymorphisms of DNA encoding BoLA-DRB3.2, which comprises the steps of:

- (1) performing PCR by using the primer set according to any one of claims 1 to 6 and using a bovine genomic DNA or a DNA fragment thereof as a template; and
(2) where two PCR products are amplified in said step (1), directly sequencing each of the amplified products, and where one PCR product is amplified in said step (1), sequencing the amplified product by using a primer set capable of amplifying all alleles of BoLA-DRB3.2, and then comparing resulting sequence(s) with known sequences of alleles.

15. The method according to claim 14, wherein PCR is performed by using a primer set capable of amplifying all alleles of BoLA-DRB3.2 using a bovine genomic DNA as a template, and then said step (1) is performed by using a resulting amplified product as a template.

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